DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Arnold Schwarzenegger, Governor

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005309

Address: 333 Burma Road **Date Inspected:** 22-Jan-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No N/A **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes N/A No

34-0006 **Bridge No: Component:** OBG COMPONENT

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance(QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing(Gate To Gate)

The QA Inspector performed, (along with ABF technician Mr.Wang Zhenhua and Mr.Ding Baohua), gate to gate Ultrasonic Testing (UT) on Orthotropic Box Girder deck plates to closed rib welds at the tack weld locations. The QA Inspector generated a field inspection UT report on this date designating areas of rejectable indications. Panel identification number are DP-145-001, DP-247-001, DP-466-001, DP-220-001, DP-385-001 and DP-170-001.

The Y locations of indication for the panel were marked and recorded as:

DP-145-001 (7EW)

Total Number of Ribs -05

Total Number of Tack Welds - 240

Total Number of Tack Welds Scanned – 240

Weld 01: Tack Welds Scanned - 24, Indication Observed - 09 Weld 02: Tack Welds Scanned - 24, Indication Observed - 04 Weld 03: Tack Welds Scanned - 24, Indication Observed - 03

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```
Weld 04:
           Tack Welds Scanned - 24, Indication Observed - 01
Weld 05:
           Tack Welds Scanned - 24, Indication Observed - 08
Weld 06:
           Tack Welds Scanned - 24, Indication Observed - 07
           Tack Welds Scanned - 24, Indication Observed - 08
Weld 07:
Weld 08:
           Tack Welds Scanned - 24, Indication Observed - 06
Weld 09:
           Tack Welds Scanned - 24, Indication Observed - 08
Weld 10:
           Tack Welds Scanned - 24, Indication Observed - 06
```

DP-247-001 (6BW)

Total Number of Ribs -05

Total Number of Tack Welds - 220

Total Number of Tack Welds Scanned - 220

```
Weld 01:
           Tack Welds Scanned - 22, Indication Observed - 03
Weld 03:
           Tack Welds Scanned - 22, Indication Observed - 01
Weld 04:
           Tack Welds Scanned - 22, Indication Observed - 02
Weld 05:
           Tack Welds Scanned - 22, Indication Observed - 02
Weld 06:
           Tack Welds Scanned - 22, Indication Observed - 03
Weld 07:
           Tack Welds Scanned - 22, Indication Observed - 02
Weld 08:
           Tack Welds Scanned - 22, Indication Observed - 03
Weld 09:
           Tack Welds Scanned - 22, Indication Observed - 05
           Tack Welds Scanned - 22, Indication Observed - 03
Weld 10:
```

DP-220-001 (6BW)

Total Number of Ribs -05

Total Number of Tack Welds - 220

Total Number of Tack Welds Scanned – 220

```
Weld 03:
           Tack Welds Scanned - 22, Indication Observed - 01
Weld 04:
           Tack Welds Scanned - 22, Indication Observed - 03
Weld 05:
           Tack Welds Scanned - 22, Indication Observed - 01
Weld 06:
           Tack Welds Scanned - 22, Indication Observed - 01
Weld 09:
           Tack Welds Scanned - 22, Indication Observed - 01
Weld 10:
           Tack Welds Scanned - 22, Indication Observed - 01
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DP-466-001 (7BE)

Total Number of Ribs -05 Total Number of Tack Welds - 260 Total Number of Tack Welds Scanned - 260

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Weld 02:
           Tack Welds Scanned - 26, Indication Observed - 01
Weld 03:
           Tack Welds Scanned - 26, Indication Observed - 05
Weld 04:
           Tack Welds Scanned - 26, Indication Observed - 03
Weld 05:
           Tack Welds Scanned - 26, Indication Observed - 01
Weld 06:
           Tack Welds Scanned - 26, Indication Observed - 01
Weld 07:
           Tack Welds Scanned - 26, Indication Observed - 01
           Tack Welds Scanned - 26, Indication Observed - 02
Weld 08:
Weld 09:
           Tack Welds Scanned - 26, Indication Observed - 04
Weld 10:
           Tack Welds Scanned - 26, Indication Observed - 03
```

DP-385-001 (7BE)

Total Number of Ribs -05

Total Number of Tack Welds - 260

Total Number of Tack Welds Scanned - 260

Tack Welds Scanned - 26, Indication Observed - 09 Weld 01: Weld 02: Tack Welds Scanned - 26, Indication Observed - 09 Weld 03: Tack Welds Scanned - 26, Indication Observed - 08 Weld 04: Tack Welds Scanned - 26, Indication Observed - 07 Weld 05: Tack Welds Scanned - 26, Indication Observed - 08 Weld 06: Tack Welds Scanned - 26, Indication Observed - 07 Weld 07: Tack Welds Scanned - 26, Indication Observed - 12 Weld 08: Tack Welds Scanned - 26, Indication Observed - 13 Weld 09: Tack Welds Scanned - 26, Indication Observed - 15

Tack Welds Scanned - 26, Indication Observed - 06

DP-170-001 (7CW)

Weld 10:

Total Number of Ribs -05

Total Number of Tack Welds - 260

Total Number of Tack Welds Scanned – 182

Weld 04: Tack Welds Scanned - 26, Indication Observed - 04 Weld 05: Tack Welds Scanned - 26, Indication Observed - 05 Weld 06: Tack Welds Scanned - 26, Indication Observed - 03 Weld 07: Tack Welds Scanned - 26, Indication Observed - 06 Weld 08: Tack Welds Scanned - 26, Indication Observed - 02 Weld 09: Tack Welds Scanned - 26, Indication Observed - 05

Weld 10: Tack Welds Scanned - 26, Indication Observed - 02

100% of UT Gate To Gate for Deck Panel (DP-170-001) Tack welds was not completed during this inspection shift.

Remaining Weld to be completed W1, W2, W3.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

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documents.

Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Bera, Subhasis	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer